

SEQUENCE LISTING

<110> Pinter, Abraham

<120> HIV-1 gp120 V1/V2 DOMAIN EPITOPES
CAPABLE OF GENERATING NEUTRALIZING ANTIBODIES

<130> 07763-048001

<140> 09/508,208

<141> 2000-03-08

<150> PCT/US98/18679

<151> 1998-09-08

<150> 60/058,155

<151> 1997-09-08

<160> 30

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 96

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 1

Val Lys Leu Thr Pro Leu Cys Val Thr Leu Asn Cys Ile Asp Leu Arg

1	5	10	15
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Asn Ala Thr Asn Ala Thr Ser Asn Ser Asn Thr Thr Asn Thr Thr Ser

20 25 30

Ser Ser Gly Gly Leu Met Met Glu Gln Gly Glu Ile Lys Asn Cys Ser

Ser	Ser	Gly	Gly	Leu	Met	Met	Glu	Gln	Gly	Glu	His	Trp
		35					40					45

Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala

Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Cys
50 55 60

Leu Phe Tyr Lys Leu Asp Ile Val Pro Ile Asp Asn Pro Lys Asn Ser

Leu Phe Tyr Lys Leu Asp Ile Val Phe Ile Asp Asn His Lys Asn
65 70 75 80

65 70 75 80
Thr Asp Thr Arg Leu Ile Ser Cys Asp Thr Ser Val Ile Thr Gln Ala

Thr Asn Tyr Arg Leu Ile Ser Cys Asn Thr Ser Val Ile Thr Glu
85 90 95

<210> 2

<211> 34

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 2

Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp

Gly	Cis	Ile	Lys	Phe	Ser	Tyr				
1				5				10		15

Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp Ile Val Pro

Lys	Val	Gln	Lys	Glu	Pyr	Ala	Leu	Pro	Pyr	Lys	Leu	Ala
		20					25					30

Ile Asp

<210> 3

<211> 93
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 3
 Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu His Cys
 1 5 10 15
 Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp Lys Glu
 20 25 30
 Met Asp Arg Gly Glu Ile Lys Asn Cys Ser Phe Lys Val Thr Thr Ser
 35 40 45
 Ile Arg Asn Lys Met Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp
 50 55 60
 Val Val Pro Ile Asp Asn Asp Asn Thr Ser Tyr Lys Leu Ile Asn Cys
 65 70 75 80
 Asn Thr Ser Val Ile Thr Gln Ala Cys Pro Lys Val Ser
 85 90

<210> 4
 <211> 7
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 4
 Glu Asn Leu Tyr Phe Gln Ser
 1 5

<210> 5
 <211> 7
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 5
 Glu Asn Leu Tyr Phe Gln Gly
 1 5

<210> 6
 <211> 28
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 6
 Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr
 1 5 10 15
 Ala Leu Phe Tyr Lys Leu Asp Val Val Pro Ile Asp
 20 25

<210> 7
 <211> 23
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 7
 Tyr Val Ser Asn Arg Gly Asn Arg Met Lys Arg Gln Asn Phe Leu Asn
 1 5 10 15
 Arg Tyr Ile Ile Ser Val Glu
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30039407.1000

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<400> 13
Met Met Glu Gln Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr
  1             5             10             15
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<210> 14
 <211> 15
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 14
 Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu
 1 5 10 15

<210> 15
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 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 15
 Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
 1 5 10 15

<210> 16
 <211> 15
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 16
 Glu Tyr Ala Leu Phe Tyr Lys Leu Asp Ile Val Pro Ile Asp Asn
 1 5 10 15

<210> 17
 <211> 19
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 17
 Lys Lys Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu
 1 5 10 15
 Phe Tyr Lys

<210> 18
 <211> 14
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 18
 Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr
 1 5 10

<210> 19
 <211> 8
 <212> PRT
 <213> Human immunodeficiency virus (HIV)

<400> 19
 Ser Thr Ser Ile Arg Gly Lys Val
 1 5

<210> 20

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<211> 17
<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 20
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr
  1             5             10             15
Lys
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<210> 21
<211> 16
<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 21  
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr  
   1                   5               10             15
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<210> 22
<211> 14
<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 22
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu
  1                   5                   10
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<210> 23
<211> 13
<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 23
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala
  1                   5                   10

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<210> 24
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<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 24
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr
1 5 10

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<210> 25
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)
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Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
 1             5             10            15
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<210> 26
<211> 13
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<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 26

Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
 1 5 10

<210> 27

<211> 12

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 27

Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
 1 5 10

<210> 28

<211> 365

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 28

Ala Ala Pro Gly Ser Ser Pro His His His His His His Val Tyr Asn
 1 5 10 15
 Ile Thr Trp Glu Val Thr Asn Gly Asp Arg Glu Thr Val Trp Ala Ile
 20 25 30
 Ser Gly Asn His Pro Leu Trp Thr Trp Trp Pro Val Leu Thr Pro Asp
 35 40 45
 Leu Cys Met Leu Ala Leu Ser Gly Pro Pro His Trp Gly Leu Glu Tyr
 50 55 60
 Gln Ala Pro Tyr Ser Ser Pro Pro Gly Pro Pro Cys Cys Ser Gly Ser
 65 70 75 80
 Ser Gly Ser Ser Ala Gly Cys Ser Arg Asp Cys Asp Glu Pro Leu Thr
 85 90 95
 Ser Leu Thr Pro Arg Cys Asn Thr Ala Trp Asn Arg Leu Lys Leu Asp
 100 105 110
 Gln Val Thr His Lys Ser Ser Glu Gly Phe Tyr Val Cys Pro Gly Ser
 115 120 125
 His Arg Pro Arg Glu Ala Lys Ser Cys Gly Gly Pro Asp Ser Phe Tyr
 130 135 140
 Cys Ala Ser Trp Gly Cys Glu Thr Thr Gly Arg Val Tyr Trp Lys Pro
 145 150 155 160
 Ser Ser Ser Trp Asp Tyr Ile Thr Val Asp Asn Asn Leu Thr Thr Ser
 165 170 175
 Gln Ala Val Gln Val Cys Lys Asp Asn Lys Trp Cys Asn Pro Leu Ala
 180 185 190
 Ile Gln Phe Thr Asn Ala Gly Lys Gln Val Thr Ser Trp Thr Thr Gly
 195 200 205
 His Tyr Trp Gly Leu Arg Leu Tyr Val Ser Gly Arg Asp Pro Gly Leu
 210 215 220
 Thr Phe Gly Ile Arg Leu Arg Tyr Gln Asn Leu Gly Pro Arg Val Pro
 225 230 235 240
 Ile Gly Pro Asn Pro Val Leu Ala Asp Gln Leu Ser Leu Pro Arg Pro
 245 250 255
 Asn Pro Leu Pro Lys Pro Ala Lys Ser Pro Pro Ala Ser Val Lys Leu
 260 265 270
 Thr Pro Leu Cys Val Thr Leu Asn Cys Ile Asp Leu Arg Asn Ala Thr

1003840 030307

[illegible]

<400> 29
Pro Cys Val Lys Leu Thr Pro Cys Val
1 5

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<210> 30
<211> 12
<212> PRT
<213> Human immunodeficiency virus (HIV)
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<400> 30
Ser Cys Asn Thr Ser Val Ile Thr Gln Ala Cys Pro
  1                      5                      10
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